

III.—On a small Collection of Arachnida from the Island of Johanna, with Note on a Homopterous Insect from the same Locality. By ARTHUR G. BUTLER, F.L.S., F.Z.S., &c.

[Plate I.]

IN the year 1877 Mr. C. W. Bewsher sent to the British Museum a series of Arthropoda collected by himself in the island of Johanna, Comoro group.

Of the insects under my immediate charge the Hemiptera Homoptera were alone represented, by an apparently new species of *Phymatostetha*, Stål. Unfortunately the example was sent over in spirits of wine, and is so discoloured and shrivelled as to render it impossible to characterize it with certainty.

The Arachnida are represented by seven species of Araneidea, five of which appear to be distinct from any thing hitherto described; they exhibit a strongly marked Mascarene character: the two most interesting forms in the collection are a new species of *Spermophora* (Pholcidae) and a probably new species of *Pasitheia*.

The following is a list of the species :—

1. *Scytodes amarantea*.

Scytodes amarantea, Vinson, Aran. de la Réunion, Maurice et Madagascar, p. 11, pl. i. fig. 2 (1863).

The single specimen sent is unfortunately destitute of abdomen. This fact, taken in conjunction with the long legs of the species (the femora of which are distinctly rugulose), gives it so completely the facies of a Phalangid, that until I had subjected it to a careful examination I was completely puzzled as to what genus it belonged to.

2. *Pasitheia foliifera*, n. sp. (Pl. I. fig. 1.)

Cephalothorax fulvous, marked with black dots and lateral divergent lines, as in *P. Lucasii*; eyes black; legs fulvous, rather thickly studded with long black spines, but not banded with black; abdomen bright sap-green, the whole central area on the upper surface occupied by a broad, central, longitudinal, slightly darker green band, of a leaf-like form, bordered and intersected with white; ventral surface with pale central area bounded by two slightly divergent curved white stripes.

Structure similar to that of *P. Lucasii*; relative length of legs 1, 2, 4, 3; length of cephalothorax and abdomen together 14 millims.

It is just possible that this may be a remarkable variety of

P. Lucasii (*Sphasus Lucasii*, Vinson, Aran. des îles de la Réunion, Maur. et Madag. pl. xiii. fig. 3); but the differences in the coloration of the abdomen and legs are so well marked, that it seems probable that it is distinct.

3. *Attus Bewsheri*, n. sp. (Pl. I. fig. 2.)

♂. Cephalothorax shining blackish piceous; a transverse suberuciform marking just beyond the middle; three unequal oblique white lines (only visible when the spider is dry) just behind the posterior lateral pairs of eyes; abdomen brassy brown, crossed in the centre and towards the posterior extremity by two slightly arched white lines interrupted in the middle; two white spots close to the posterior margin; legs piceous, with the terminal tarsal joints fulvous; metatarsi of posterior pair of legs indistinctly banded with fulvous; palpi piceous, clothed with silky whitish hairs, terminal joint fulvous below; falces piceous; pectoral shield and coxæ fulvous; venter grey.

Cephalothorax square to the middle, thence slightly and gradually contracted, and with its posterior margin convex; superior surface smooth, its highest point being in the centre, which is bounded by the posterior lateral oculiferous tubercles; on each side of this central ridge the surface is oblique; abdomen subcylindrical, truncated at each end, slightly wider in front than behind; relative size of eyes as follows—anterior central, anterior lateral, posterior lateral, intermediate lateral, the *a c** pair being about six times the size of the *a l* pair, the *i l* being situated at about the centre of the interval between the two other lateral pairs; relative length of legs 1, 2, 4, 3; length of cephalothorax and abdomen 6 millims.

4. *Attus Johannæ*, n. sp. (Pl. I. fig. 3.)

♂ ♀. Cephalothorax blackish piceous, dull, crossed behind the middle by a bisinuate fulvous band (obscured by white pile when dry); the lateral margins, borders of anterior oculiferous tubercles, and a spot on the caput white; abdomen blackish, with the margins and an ornamental longitudinal sceptre-like central stripe white; legs and palpi piceous, banded with white; under surface of terminal joint of palpi, coxal joints of legs, and pectoral shield fulvous; venter whitish, with central and lateral longitudinal blackish lines.

Cephalothorax inverted-bell-shaped, its superior surface

* For brevity I should propose to indicate these by letters thus—*a c*, *a l*, *p l*, *i l*.

flattened in front and shelving behind; abdomen subcylindrical, narrower behind than in front, with truncated anterior margin; relative size and position of eyes as in the preceding species, briefly expressed as follows— $a c 6$, $a l = p l 1$, $i l \frac{1}{4}$; relative length of legs 1, 3, 2, 4, but the three posterior pairs differing very slightly in length; cephalothorax and abdomen together 7 millims.

This species seems to be intermediate in character between *A. baptizatus* of Rodriguez and *A. muscivorus* of Réunion and Mauritius; it is, however, unquestionably nearest to the latter.

5. *Attus anjuanus*, n. sp. (Pl. I. fig. 4.)

♀. Cephalothorax piceous (when dry of a golden bronzy colour), crossed behind the middle by a bisinuated castaneous belt, behind which the coloration is paler than on the caput; abdomen whitly brown, with a longitudinal arched black stripe on each side; anterior border black-speckled; spinners blackish; legs and palpi castaneous, clothed with white hairs; falces piceous; legs below and pectoral shield fulvous; venter whitish.

Cephalothorax rather elongated, inverted-bell-shaped, flattened in front and obliquely arched from behind the posterior oculiferous tubercles, the latter placed at anterior third; abdomen ovate, with convex anterior margin, posterior margin acuminate; relative size of eyes, $a c 6$, $a l = p l 1$, $i l \frac{1}{6}$; relative length of legs 1, 3, 2, 4; cephalothorax and abdomen together 8 millims.

Apparently allied to *A. africanus* of Réunion.

6. *Spermophora comoroensis*, n. sp. (Pl. I. fig. 5.)

Fulvous, with whitish abdomen; falces below reddish castaneous.

Cephalothorax inverted-heart-shaped, posterior margins of the caput indicated by a depressed V-shaped line, from which a central depressed longitudinal line runs to the posterior margin; abdomen ovoid; legs somewhat sparsely but regularly covered with minute black granular dots; tarsi clothed with short setæ; palpi setose; pectoral shield elongate scutiform; eyes six in number, about equal in size, placed in pairs; the anterior pair placed in the centre of the anterior portion of the caput, the lateral pairs at about the same distance from the anterior pair as is covered by the two eyes themselves, and placed obliquely; male palpus with the fourth joint barrel-shaped, much larger than the three preceding it, terminating in a bulb-like joint fringed externally with stiff bristles, and

bearing on its inner surface the seminal organ, which is also bulb-shaped and tapers above into a long spine-like corneous process; relative length of legs 2, 4, 1, 3; cephalothorax and abdomen together, of ♂ 7 millims., of ♀ 8 millims.

I have to thank the Rev. O. P. Cambridge for referring me to the genus of this species.

7. *Gasteracantha madagascariensis?*, var.

Gasteracantha madagascariensis, Vinson, Aran. de la Réunion, Maurice et Madagascar, p. 242, pl. ix. fig. 6 (1863).

In coloration the example sent agrees far better with *G. mauritia* of Walckenaer, the cephalothorax and femora being reddish castaneous, the tibiæ and tarsi black, the abdomen above (in the spirit-example sent) buff-yellow, with black spines and depressed spots ("sigilla," Cambr.), below black spotted with yellow. The Rev. O. P. Cambridge thinks it more probably a variety of *G. madagascariensis*; and if this be so, I see no reason why the latter should not be conspecific with *G. mauritia*, since the difference of form, so far as I can judge, seems to be very slight between these two spiders.

As regards the strange modification of pattern which must have taken place if this be in truth a pale variety of *G. madagascariensis*, I may mention that, so far as can be determined from dried specimens, *G. flavomaculata* seems to show a tendency towards a similar modification.

EXPLANATION OF PLATE I.

- Fig. 1. Pasithea foliifera*, Butl. (twice the natural size). 1 *a.* Profile view of the same, slightly enlarged.
Fig. 2. Attus Bewsheri, Butl. (twice the natural size). 2 *a.* The same, in profile.
Fig. 3. Attus Johannæ, Butl. (twice the natural size). 3 *a.* The same, in profile. 3 *b.* Male palpus, much enlarged.
Fig. 4. Attus anjuanus, Butl. (twice the natural size). 4 *a.* The same, in profile.
Fig. 5. Spermophora comoroensis, Butl. (twice the natural size). 5 *a.* The same, in profile. 5 *b.* Male palpus, much enlarged.

IV.—*On Plocamia plena, a new Species of Echinonematous Sponge.* By W. J. SOLLAS, M.A., F.G.S., &c.

[Plates VI. & VII.]

Plocamia plena, n. sp. (Pl. VI.)

(Examined in the dry state.)

Sponge fan-shaped (Pl. VI. fig. 1): a horizontal incrusting base (*b*), $\frac{1}{20}$ inch thick, smooth and irregular on the under sur-